



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,066	12/27/2001	Suresh Raghavan	10541-870	3261

29074 7590 10/20/2003

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60611

EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,066

Applicant(s)

RAGHAVAN ET AL.

Examiner

Greg Binda

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Art Unit: 3679

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

2. The amendment filed Sep 5, 2003 is objected to under 37 CFR 121(c)(1)(ii) because claims 17 & 19 are identified as “currently amended” but no changes are indicated.

Drawings

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on Sep 5, 2003 have been approved.

Specification

4. The disclosure is objected to because amended para 0006 includes the undefined acronym “NVH”.

5. The abstract of the disclosure is objected to because it begins with a phrase that can be implied, “The present invention involves”.

Claim Objections

Art Unit: 3679

6. Claim 19 is objected to because it includes the limitation, “in-oz oz-in” which should be changed to -- oz-in --.

Claim Rejections - 35 U.S.C. § 102

7. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Oros et al, US 4,912,299 (Oros). Fig. 3 shows a driveshaft comprising: a tube 11 having a driveshaft wall (see “wall” in col. 4, line 30) extending to an open end 15, the wall having an inner surface 24 and an outer surface 26; and a yoke 17 welded to the open end 15 of the tube 11, the yoke 17 having a body portion (nominally indicated by numeral 18) and a tube engaging pilot 20 extending from the body portion having a head and an outer wall extending therefrom to the tube engaging pilot 20, the pilot having a contact wall 23 extending from the outer wall defining an outer shoulder 22 to engage the open end 15 and engage the inner surface 24 of the driveshaft wall to press fit (see also “interference fit” in col. 4, line 47) into the tube. In col. 5, lines 7 & 8, Oros discloses that the yoke is welded to the open end of the tube with an aluminum alloy.

8. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Zackrisson, US 4,527,978. Figs. 1 & 2 show a driveshaft 10 comprising: a tube 12 having a driveshaft wall (see “wall” in col. 2, line 4) extending to an open end (see “end” col. 2, line 15), the wall having an inner surface and an outer surface; and a yoke 14 welded (see col. 2, line 23) to the open end of the tube 11. Fig. 2 shows the yoke 14 having a body portion and a tube engaging pilot 20

Art Unit: 3679

extending from the body portion having a head and an outer wall extending therefrom to the tube engaging pilot 20, the pilot having a contact wall 22 extending from the outer wall defining an outer shoulder 22 to engage the open end and engage the inner surface of the driveshaft wall to press fit into the tube 12. In col. 2, lines 15-40, Zackrisson discloses that the yoke is welded to the open end of the tube with an aluminum alloy.

9. Claims 16-18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Breese, US 6,015,350.

Claim Rejections - 35 U.S.C. § 103

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oros. Oros shows a driveshaft comprising all the limitations of the claim, but Oros does not expressly disclose the driveshaft configured to have a balance less than 0.2 oz-in unbalance. However, it would have been obvious to one of ordinary skill in the art to design the driveshaft of Oros such that its balance is less than 0.2 oz-in unbalance, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of the prior art references cited in items 8 & 9 above for the same reason noted in item 10.

Art Unit: 3679

Response to Arguments

12. Applicant's arguments filed Sep 5, 2003 have been fully considered but they are not persuasive.

a. Applicant argues that Oros fails to anticipate the claimed invention because Oros "fails to teach a contact wall engaging the inner surface of the drive shaft". However as noted in the rejection above, in Fig. 3 Oros clearly shows the contact wall 23 engaging the inner surface 24 of the drive shaft 11. See also Oros col. 4, lines 44-47.

b. Applicant argues that Zackrisson "fails to teach a contact wall being radially formed to pres fit into the tube," but in Fig. 2 Zackrisson shows precisely those features.

c. Applicant argues that Breese '350 fails to "teach an outer shoulder [on a yoke] engaging the open end of the tube," but in Fig. 2 Breese' 350 shows precisely those features.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 3679

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Greg Binda
Primary Examiner
Art Unit 3679